

AMENDMENTS TO THE CLAIMS

1. (Currently Amended) A communication device, comprising:
a plurality of physical layers;
memory means for storing a communication quality level required by ~~a~~
a subject application; and

physical layer selecting means for selecting among said plurality of physical layers, a physical layer currently capable of providing communications in the communication quality level required by the subject application, as a physical layer for the subject application to use in communicating.

2. (Original) The communication device as set forth in claim 1, wherein:

said communication quality level is determined by an effective throughput, a response time, a transmission rate of the physical layer or a receiving radio field intensity.

3. (Currently Amended) The communication device as set forth in claim 1, wherein:

in the case where none of the physical layers is capable of providing communications in the quality level required by the subject application, said physical layer selecting means informs that to the subject application ~~to urge it to~~ and requests that the subject application lower the required communication quality level ~~to be required~~.

4. (Original) The communication device as set forth in claim 1, wherein:

said physical layer selecting means determines a current communication state of each of said plurality of physical layers according to a predetermined priority order set beforehand from that of the highest priority if it is capable of providing communications in the communication quality level required by the subject application, and selects the physical layer capable of providing communications in the communication quality level if any.

5. (Currently Amended) The communication device as set forth in claim 1, wherein:

said plurality of physical layers include a physical layer for use in communicating via ~~the~~a radio communication path.

6. (Currently Amended) The communication device as set forth in claim 5, wherein:

said plurality of physical layers include a physical layer which communicates via the radio communication path, using a radio frequency band of either 2.4 GHz ~~[GHz]~~ band or 5 GHz ~~[GHz]~~ band.

7. (Original) The communication device as set forth in claim 5, wherein:

at least one of said plurality of physical layers that communicates via the radio communication path is provided with a plurality of antennas, and

when determining a current communication state of each of said plurality of physical layers if it is capable of providing communications in the communication quality level as required by the subject application, said physical layer selecting means switches an antenna among said plurality of antennas in order to obtain respective receiving states, and determines the current communication state of each of said plurality of physical layers based on a receiving state.

8. (Currently Amended) The communication device as set forth in claim 5, ~~wherein~~ further comprising:

~~the physical layer that communicates a plurality of physical layers which communicate~~ via the radio communication path ~~is provided in plural number, and wherein~~

a physical layer, of the plurality of physical layers which communicate via the radio communication path, having a highest radio wave frequency of ~~said plurality of physical layers~~ is provided with a mobile antenna ~~that permits its having an adjustable~~ installation position ~~to be changed~~.

9. (Currently Amended) The communication device as set forth in claim 5, wherein:

~~at least one of said plurality of said physical layers~~ layer that communicates via the radio communication path includes a mobile antenna ~~that permits its having an adjustable~~ installation position ~~to be changed~~, and said communication device further comprising:

stoppage instruction means for temporally stopping the operation of selecting the physical layer by said physical layer selecting means while the ~~placement-installation~~ position of the mobile antenna is being adjusted.

10. (Currently Amended) The communication device as set forth in claim 4, wherein:

said plurality of physical layers include plural physical layers that communicate via ~~the~~ a radio communication path, and

the priority order of ~~these~~ the physical layers that communicate via the radio communication path is ordered from highest to lowest radio field frequency ~~set such that the higher is the radio field frequency, the higher is the priority order.~~

11. (Currently Amended) The communication device as set forth in claim 3, wherein:

said memory means stores the priority order of said plurality of physical layers independently for each ~~application~~ of a plurality of subject applications, and

upon selecting a physical layer for the application to use in communicating, said physical layer selecting means reads out the priority order of the application from the memory means and selects the physical layer according to the priority order.

12. (Original) The communication device as set forth in claim 1, wherein:

said physical layer selecting means selects a physical layer for the subject application to use in both directions of transmitting and receiving.

13. (Currently Amended) The communication device as set forth in claim 1, wherein:

said physical layer selects the first physical layer for use in transmitting a signal in a transmitting direction or a receiving direction ~~which is mainly used~~, at least one of said plurality of physical layers ~~that~~ communicate via ~~the~~ a radio communication path and are provided with a plurality of antennas, and selects from other physical layers than the ~~second~~ first physical layer for use in signal transmission in other direction.

14. (Currently Amended) The communication device as set forth in claim 1, wherein:

said memory means stores a transmission method of either full-duplex transmission or half-duplex transmission to be adopted for each application; and

in the case where the stored transmission method for the subject application is a ~~half~~ full duplex transmission, said physical layer selecting means selects a physical layer for both transmitting and receiving directions to be used for the application; while, in the case where the transmission method stored for the subject application is a half duplex transmission, said physical layer selecting means selects a physical layer for use in transmitting a signal in either a transmitting direction or a receiving direction which is mainly used, and selects from other physical layer than the physical

layer for use in transmitting a signal in the mainly used direction, for use in transmitting a signal in the other direction.

15. (Currently Amended) The communication device as set forth in claim 1, wherein:

said physical layer selecting means is provided with physical layer fixing means which ~~makes~~ controls said physical layer selecting means to select a predetermined physical layer for the subject application to use in communicating, ~~irrespectively~~ irrespective of a communication state.

16. (Currently Amended) The communication device as set forth in claim 15, wherein:

said physical layer fixing means ~~makes~~ controls said physical layer selecting means to select the predetermined physical layer only when the subject application does not require ~~the~~ a band grantee.

17. (Original) The communication device as set forth in claim 1, wherein:

in the case where the subject application starts communicating with a second correspondent different from a first correspondent which is a current correspondent of the subject application, said physical layer selecting means selects from said plurality of physical layers, a physical layer not in use by the subject application, as a physical layer for use in communicating with the second correspondent.

18. (Original) The communication device as set forth in claim 17, wherein:

in the case where the physical layer as selected for use in communicating with the second correspondent cannot be used, said physical layer selecting means selects the physical layer in use for communicating with the first correspondent to be used in common between the first correspondent and the second correspondent.

19. (Currently Amended) The communication device as set forth in claim 13, wherein:

in the case where the subject application starts communicating with a second correspondent different from a first correspondent to which the subject application is communicating, said physical layer selecting means selects between the first physical layer in use by the subject application and the second physical layer, the second physical layer to be used ~~in common between~~ by both of said first correspondent and said second correspondent.

20. (Currently Amended) The communication device as set forth in claim 19, wherein:

in the case where the physical layer as selected for use in communicating with the second correspondent cannot be used, said physical layer selecting means selects the first physical layer to be used ~~in common between~~ by both of the first correspondent and the second correspondent.

21. (Original) The communication device as set forth in claim 1, further comprising:

communication state presenting means which presents a communication state of each of said plurality of layers.

22. (Original) The communication device as set forth in claim 5, further comprising:

communication state presenting means which presents a communication state of each of said plurality of layers.

23. (Currently Amended) The communication device as set forth in claim 21, ~~wherein~~ further comprising:

~~said application is provided in plural number~~ a plurality of subject applications, and wherein

said communication state presenting means presents if ~~whether~~ a communication state of each physical layer is capable of providing communications in the communication quality level required by each application.

24. (Original) The communication device as set forth in claim 21, wherein:

communication state presenting means presents not only the communication state of each of said plurality of physical layers but also the physical layer being selected by said physical layer selecting means.

25. (Currently Amended) The communication device as set forth in claim 21, wherein:

communication state presenting means presents said communication state ~~together with~~ in a display by together with said subject application.

26. (Original) The communication device as set forth in claim 1, wherein:

said communication device is a video receiving device or a video storage device.

27. (Original) The communication device as set forth in claim 1, wherein:

said communication device is a video transmitting device.

28. (Currently Amended) A program which makes a computer operate as:

memory means for storing a communication quality level required by ~~an~~ a subject application; and

physical layer selecting means for selecting among said plurality of physical layers, a physical layer currently capable of providing communications in the communication quality level required by the subject application, as a physical layer for the subject application to use in communicating.

29. (Currently Amended) A recording medium storing a program which makes a computer operate as:

memory means for storing a communication quality level required by ~~an~~
a subject application; and

physical layer selecting means for selecting among said plurality of physical layers, a physical layer currently capable of providing communications in the communication quality level required by the subject application, as a physical layer for the subject application to use in communicating.